United Nations Framework Convention on Climate Change-COP17: Durban, South Africa A First-Hand Account



UNFCCC Background

UNFCCC was a result of the Rio Earth Summit in 1992 (first international Earth Summit).

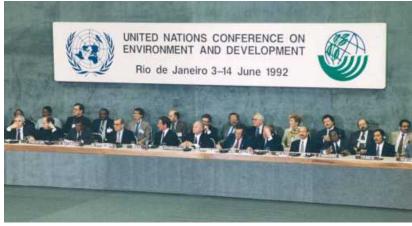


Objective: stabilize greenhouse gasses in the atmosphere at a level that would prevent dangerous anthropogenic interference with the Earth's climate system.

First UNFCCC was held in 1995

Parties to the convention meet annually

- -no mandatory GHG emission limits
- -no enforcement
- -non-binding
- -treaty provides for updates (protocols) that set mandatory emission levels. Principal update-Kyoto Protocol.
- -Kyoto Protocol was formed in 1997 as a way to set mandatory emission limits and binding agreements.
- -It entered into force in Feb 2005 and expires in 2012



Baobab Negotiating Hall





Pavillions









U.S. Presence at COP-17



Todd Stern: Head of the US Delegation to COP17



U.S. Center

U.S. Center



Panel Discussions from: USAID, DOD, EPA, NIH, DOE, NOAA, NASA, DOC

NASA Panel Discussion: "Viewing Earth's Climate from Space"

Jack Kaye (NASA HQ), Jeff Privette (NOAA), Erika Podest (JPL), Yann Kerr (CESBIO)

The Role of Women in Climate Change







Poverty



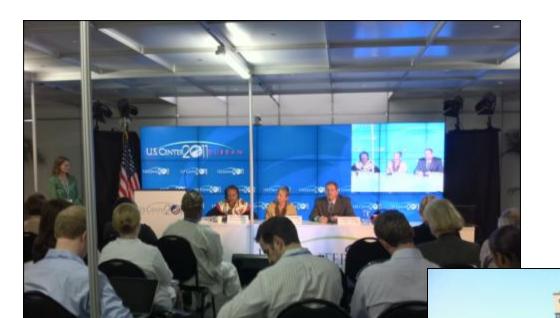
a significant cause of environmental degradation

Climate Change Refugees



Climate related issues are the biggest underlying cause of refugees, more than those displaced by war and political repression combined. Climate change refugees are not recognized by international law.

Governance: Sustainability of Cities



best practices for promoting energy efficiency and clean and renewable energy

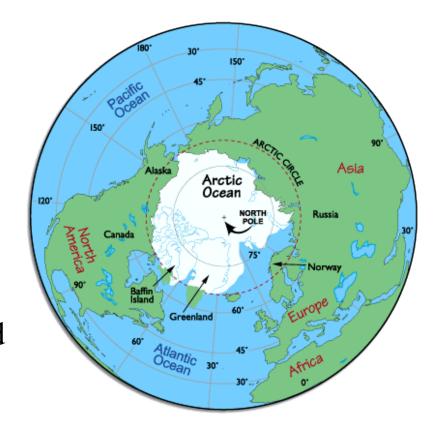
DOD: National Security



Interest in climate change for reasons of national security and military readiness.

RAdm. Titley

- 1. Sea level rise affecting military infrastructure.
- 2. Opening of the Arctic.
- 3. Issues of instability related to food production, famine, population displacement.

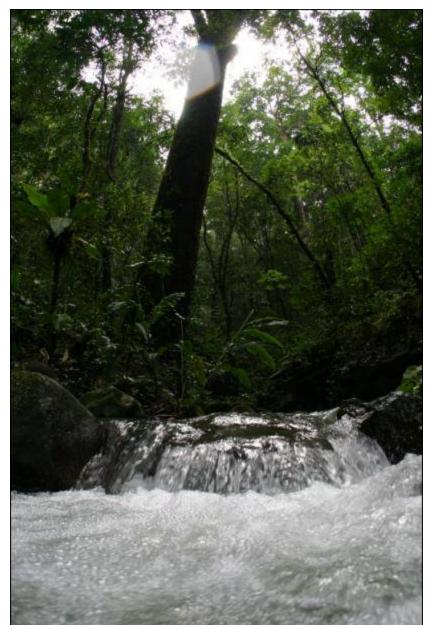


Protecting Forests for their Value



Maintaining and supporting recovery of forests is an effective means for combating climate change

REDD+-Reducing Emissions From Deforestation and Forest Degradation



REDD- effort to create a financial value for carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development.

REDD+ includes the role of conservation and sustainable management of forests.

MRV- Measurement, reporting and verification.

*Potential inclusion of agroforestry

Smart Agriculture



Smart agriculture seeks to increase sustainable productivity, strengthen farmers' resilience, reduce agriculture's greenhouse gas emissions and increase carbon sequestration.

Develop agricultural practices that cover both adaptation and mitigation.



Greenhouse Gas Emissions



Under the Protocol, 37 countries ("Annex I countries") commit themselves to a reduction of four greenhouse gases (GHG) (carbon dioxide, methane, nitrous oxide, sulphur hexafluoride) and two groups of gases (hydrofluorocarbons and perfluorocarbons).

Target: reduce their greenhouse gas emissions by 5.2% on average for the period 2008-2012. This reduction is relative to their annual emissions in a base year, usually 1990.



Other Issues Related to Climate Change and Earth Science



- -food security
- -natural disasters
- -desertification
- -biodiversity loss
- -human health
- -water security

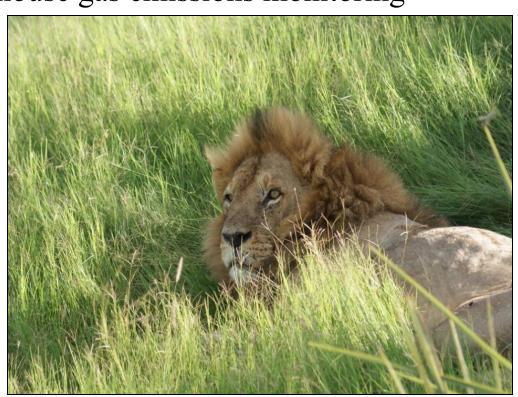






Strategizing for the Future

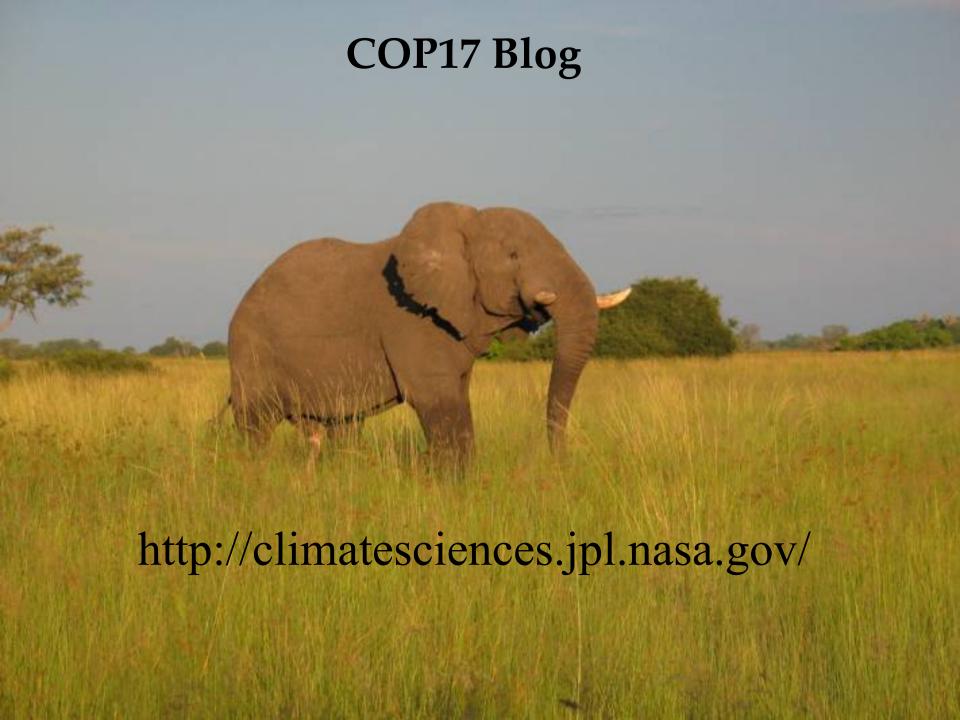
- -REDD
- -sea level rise at the regional level
- -capability of climate change projections at national levels
- -disasters and extreme events
- -water availability
- -greenhouse gas emissions monitoring



Decisions and Agreements at the 11th Hour



- -extension of the Kyoto Protocol 5-7 years;
- -adopt a universal legal agreement on climate change by 2015;
- -new agreement will be enforced starting 2020;
- -establishment of a Green Climate Fund, which will channel money to help developing countries with mitigation and adaptation activities;
- -kick-start the search for a host for the Climate Technology Centre and Network to promote technology transfer between developed and developing countries.



The Future of the Rhino and the Future of the UNFCCC



